

LISTING OF THE CLAIMS:

Claims 1-8 (Cancelled)

9. (Currently amended) A management protocol proxy for performing network management between ~~different networks~~ a first network and a second network connected via an Internet Protocol (IP) Network Address Translator (NAT), comprising:

an address translation processing unit that translates a transmission source address, contained in a packet of management protocol transmitted from a monitored apparatus on ~~[[a]] the first network~~ connected by the management protocol proxy, into a management address belonging to ~~[[an]] a third address system different from an address system~~ first and second address systems of the first network and the second network, respectively, defined by the NAT;

an assembly/disassembly processing unit that generates management protocol proxy data including the packet of management protocol after the address translation, a transmission source address in which an address of the management protocol proxy is set, and a transmission destination address in which an address of another management protocol proxy is set; and

a communication unit that transmits the management protocol proxy data to said another management protocol proxy designated by the transmission destination address ~~to provide a virtual path communication.~~

10. (Currently amended) The management protocol proxy according to claim 9, further comprising:

an address translation definition ~~in which~~ defining correspondence relationships between management addresses belonging to the ~~different third address system~~ different from the first and second address systems defined by the NAT and ~~real addresses are defined,~~

wherein the address translation processing unit translates the transmission source address contained in the packet of a management protocol into a management address, based on the address translation definition.

11. (Previously presented) The management protocol proxy according to claim 10, wherein the address translation processing unit further translates address information in data contained in the packet of management protocol.

12. (Previously presented) The management protocol proxy according to claim 11, wherein:

the management protocol is Simple Network Management Protocol (SNMP),
the packet of the management protocol comprises an SNMP message, and
the data contained in the packet of the management protocol is a Protocol Data Unit (PDU).

13. (Previously presented) The management protocol proxy according to claim 12, wherein the address translation processing unit translates address information contained in the PDU of the SNMP message using the address translation definition and an Abstract Syntax Notation One (ASN.1) define statement of a MIB object to be translated.

14. (Currently amended) The management protocol proxy according to claim 9, wherein:

said another management protocol proxy comprises an address translation definition in which correspondence relationships between real addresses and management addresses belonging to the third address system ~~different from the address system defined by the NAT~~ are defined, and

an address translation processing unit of said another management protocol proxy translates address information in data contained in the packet of management protocol, based on the address translation definition of said another management protocol proxy.

15. (Previously presented) The management protocol proxy according to claim 14, wherein:

the management protocol comprises Simple Network Management Protocol (SNMP),

the packet of the management protocol is an SNMP message, and

the data contained in the packet of the management protocol is a Protocol Data Unit (PDU).

16. (Previously presented) The management protocol proxy according to claim 15, wherein the address translation processing unit of said another management proxy translates address information contained in the PDU of the SNMP message using the address translation definition and an Abstract Syntax Notation One (ASN.1) define statement of a MIB object to be translated.

17. (Previously presented) The management protocol proxy according to claim 9, wherein the management protocol proxy comprises a proxy server.

18. (Previously presented) The management protocol proxy according to claim 9, wherein the translation of the transmission source address by the address translation processing unit translates the transmission source address into a virtual address.

19. (Currently amended) A method of performing network management between ~~different networks~~ a first network and a second network connected via an Internet Protocol (IP) Network Address Translator (NAT), comprising:

translating a transmission source address, contained in a packet of management protocol transmitted from a monitored apparatus on ~~[[a]] the first~~ the first network connected by a management protocol proxy, into a management address belonging to ~~[[an]] a third~~ a third address system different from ~~[[an]] first and second~~ first and second address ~~system~~ systems of the first network and the second network, respectively, defined by the NAT;

generating management protocol proxy data including the packet of management protocol after the address translation, a transmission source address in which an address of the management protocol proxy is set, and a transmission destination address in which an address of another management protocol proxy is set; and

~~providing a virtual path communication,~~ by transmitting the management protocol proxy data to said another management protocol proxy designated by the transmission destination address.

20. (Currently amended) The method according to claim 19, ~~wherein~~ wherein:

the translating of the transmission source address comprises translating the transmission source address contained in the packet of management protocol into a management address, based on an address translation ~~definition~~ definition; and

the address translation definition defines correspondence relationships between management addresses belonging to the third address system different from the first and second address systems defined by the NAT and real addresses.

21. (Previously presented) The method according to claim 20, further comprising translating address information in data contained in the packet of management protocol.

22. (Previously presented) The method according to claim 21, wherein:

the management protocol is Simple Network Management Protocol (SNMP),

the packet of the management protocol comprises an SNMP message, and

the data contained in the packet of the management protocol is a Protocol Data Unit (PDU).

23. (Previously presented) The method according to claim 22, wherein the translating of address information in data contained in the packet of a management protocol comprises translating address information contained in the PDU of the SNMP message using the address translation definition and an Abstract Syntax Notation One (ASN.1) define statement of a MIB object to be translated.

24. (Currently amended) The method according to claim 19, further comprising:

translating address information in data contained in the packet of management protocol at said another management protocol proxy, based on an address translation definition of said another management protocol proxy;

wherein the address translation definition of said another management proxy defines correspondence relationships between real addresses and management addresses belonging to the third address system ~~different from the address system defined by the NAT.~~

25. (Previously presented) The method according to claim 24, wherein:

the management protocol comprises Simple Network Management Protocol (SNMP),

the packet of the management protocol is an SNMP message, and

the data contained in the packet of the management protocol is a Protocol Data Unit (PDU).

26. (Previously presented) The method according to claim 25, wherein the translating of address information in data contained in the packet of management protocol at said another management protocol proxy comprises translating address information contained in the PDU of the SNMP message using the address translation definition and an Abstract Syntax Notation One (ASN.1) define statement of a MIB object to be translated.

27. (Previously presented) The method according to claim 19, wherein the translating of the transmission source address comprises translating the transmission source address into a virtual address.

28. (Currently amended) A program product comprising a computer readable storage medium and executable programming embodied on the medium, wherein execution of the programming causes a programmable device to perform network management between ~~different networks~~ a first network and a second network connected via an Internet Protocol (IP) Network Address Translator (NAT), comprising the steps of:

translating a transmission source address, contained in a packet of management protocol transmitted from a monitored apparatus on ~~[[a]] the first~~ network connected by a management protocol proxy, into a management address belonging to ~~[[an]] a third~~ address system different from ~~[[an]] first and second~~ address ~~system~~ systems of the first network and the second network, respectively, defined by the NAT;

generating management protocol proxy data including the packet of management protocol after the address translation, a transmission source address in which an address of the management protocol proxy is set, and a transmission destination address in which an address of another management protocol proxy is set; and

~~providing a virtual path communication,~~ by transmitting the management protocol proxy data to said another management protocol proxy designated by the transmission destination address.

29. (Currently amended) The product according to claim 28, ~~wherein~~ wherein:

the translating of the transmission source address comprises translating the transmission source address contained in the packet of management protocol into a management address, based on an address translation ~~definition~~ definition; and

the address translation definition defines correspondence relationships between management addresses belonging to the third address system different from the first and second address systems defined by the NAT and real addresses.

30. (Previously presented) The product according to claim 29, wherein the steps performed further comprise translating address information in data contained in the packet of management protocol.

31. (Previously presented) The product according to claim 30, wherein:
the management protocol is Simple Network Management Protocol (SNMP),
the packet of the management protocol comprises an SNMP message, and
the data contained in the packet of the management protocol is a Protocol Data Unit (PDU).

32. (Previously presented) The product according to claim 31, wherein the translating of address information in data contained in the packet of management protocol comprises translating address information contained in the PDU of the SNMP message using the address translation definition and an Abstract Syntax Notation One (ASN.1) define statement of a MIB object to be translated.

33. (Currently amended) The product according to claim 28, wherein:

the steps performed further comprise translating address information in data contained in the packet of management protocol at said another management protocol proxy, based on an address translation definition of said another management protocol proxy; and

the address translation definition of said another management protocol proxy defines correspondence relationships between real addresses and management addresses belonging to the third address system ~~different from the address system defined by the NAT.~~

34. (Previously presented) The product according to claim 33, wherein:

the management protocol comprises Simple Network Management Protocol (SNMP),

the packet of the management protocol is an SNMP message, and

the data contained in the packet of the management protocol is a Protocol Data Unit (PDU).

35. (Previously presented) The product according to claim 34, wherein the translating of address information in data contained in the packet of management protocol at said another management protocol proxy comprises translating address information contained in the PDU of the SNMP message using the address translation definition and an Abstract Syntax Notation One (ASN.1) define statement of a MIB object to be translated.

36. (Previously presented) The product according to claim 28, wherein the translating of the transmission source address comprises translating the transmission source address into a virtual address.